

Amendments to the Specification

Please amend the paragraph beginning on line 24 of page 9 as follows:

In another method of the current invention, the aforementioned plants designed to contain reduced or eliminated activity for a protein processing protease are used in a method for determining whether this protease proteolyses a polypeptide of interest. An expression cassette comprising a nucleotide sequence encoding the polypeptide of interest is inserted into plants or plant cells with reduced or eliminated activity for a particular protein processing protease. Proteins are collected from protein storage tissues using methods available in the art, and the existence of protease cleavage sites in the polypeptide of interest is determined by comparing the size or expression levels of the polypeptide of interest expressed in the wild type protein storage organ with that expressed in modified protein storage organs using any method available in the art. For example, such methods include but are not limited to one or two dimensional polyacrylamide gel electrophoresis coupled with immunoblotting using antibodies directed against the polypeptide of interest, amino-terminal protein sequencing, and mass spectroscopy. See, for example, Mastsudaira, P (ed.) (1993) *A Practical Guide to Protein and Peptide Purification for Microsequencing*, Academic Press, Inc. When a protein processing protease is shown to proteolyse a polypeptide of interest, the exact cleavage sites for the protease in the polypeptide can be ascertained by sequencing isolated fragments of the polypeptide of interest produced in the storage organ with wild type protease activity using any method known in the art. See, for example, U.S. Patent No. 6,064,754 to Parkeh *et al.*, herein incorporated by reference. Other methods known in the art can also be used to characterize proteases that act upon a specific polypeptide of interest, such as *in vitro* assays or computer analysis of sequence or structure.

Please amend the paragraph beginning on line 14 of page 35 as follows:

Plants homozygous for a  $\epsilon$ -VPE transposon disruption and plants homozygous for a  $\beta$ -VPE transposon disruption were crossed and the seed from these crosses selected. The seed was grown out, DNA isolated, and the PCR using allele-specific primers was used to confirm that these plants each contained both an  $\epsilon$ -VPE::dSpm allele and a  $\beta$ -VPE::dSpm allele. These plants

were allowed to self pollinate and progeny was again grown out. DNA is isolated from these plants and the PCR performed to determine which of the segregating progeny is homozygous for both insertional events. These plants are allowed to self propagate and provide a line for which ~~two~~ proteases are now removed.